

MILPITAS PLANNING COMMISSION AGENDA REPORT

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TITLE: PLANNING COMMISSION REVIEW

Proposal: Overview of the new C.3 urban runoff requirements, including new draft guidebook and revised development review process, for development projects

Location: Citywide

RECOMMENDATION: N/A

Applicant: Initiated by City

Attachments: Draft City of Milpitas Stormwater C.3 Guidebook
Draft recommended special conditions

BACKGROUND

The City of Milpitas, along with twelve other South Bay cities, the County of Santa Clara, and the Santa Clara Valley Water District, jointly holds a stormwater discharge permit from the California Regional Water Quality Control Board for the San Francisco Bay Region (RWQCB). This permit is known as the National Pollutant Discharge Elimination System (NPDES) permit, and it regulates what may be allowed to drain into the city storm drain system and local creeks, which ultimately empties into the San Francisco Bay. Ultimately, the purpose of the permit is to eliminate pollutants from the runoff waters entering the storm drain system and, ultimately, the San Francisco Bay.

The Problem with Runoff and Impervious Surfaces

The NPDES permit recognizes that urban development *increases pollutants* within the area's creek and Bay waters, and that it *increases the volume and velocity of water runoff*. Urban development creates impervious surfaces by adding streets, pavement and buildings, thus increasing the amount of runoff that must be accommodated (because the rain that falls on impervious surfaces cannot be absorbed by those surfaces and must go somewhere), while at the same time decreasing the amount of pervious soil areas into which the rainwater can percolate.



Pollutants from urban and suburban areas—such as car emissions, car maintenance wastes, pesticides, household hazardous wastes, pet waste, trash—enter the storm drain system along with rainwater and other drainage. These pollutants drain along street gutters, concentrating within stormwater pipes and creeks, and ultimately flowing into the Bay—thus polluting the creeks and Bay waters. The pollutants present in stormwater can have damaging effects on both human and aquatic ecosystems. Natural vegetated soil can both absorb rainwater and remove pollutants, thus providing a natural purification process. However, largely impervious urban areas do not contain enough natural vegetated soil areas to provide such purification.

The proliferation of impervious surfaces, such as paved areas, also increases runoff volume and velocity. This is a concern because increased runoff volume and velocity can greatly accelerate the erosion of downstream watercourses. Such erosion causes increased siltation of the Bay.

Permit History

The permit history has its inception with the Clean Water Act, to which Congress adopted amendments in 1987. In 1990, the United States Environmental Protection Agency issued implementing regulations empowering the RWQCB to issue a joint stormwater discharge permit to Milpitas, along with twelve other South Bay cities, the County of Santa Clara, and the Santa Clara Valley Water District. Other regions with the Bay Area were likewise issued permits.

Since the early 1990s, Milpitas has required contractors to implement temporary measures, known as Best Management Practices (BMPs), to minimize the amount of sediment and other pollutants that enter water runoff from a site during construction. For the last few years, the City has also encouraged applicants to design their projects to minimize impervious area and to incorporate into their plans permanent features and devices that detain, retain or treat runoff for the life of the project. For example, the Planning Commission has reviewed project plans that show roof downspouts leading drainage to landscaped areas, as well as the elimination of curbing around parking lot landscaped areas so that parking lot drainage could enter and filter into the landscaped areas.

The California Regional Water Quality Control Board for the San Francisco Bay Region (RWQCB) has now mandated that the City of Milpitas (and the other co-permittees) impose new, more stringent requirements to control runoff from development projects. These new requirements are known as the “C.3” permit provisions.

C.3 Permit Provisions

Development projects will need to incorporate Best Management Practices (BMPs), including design features (such as reducing impervious surfaces, and minimizing contiguous impervious areas), as well as treatment devices and features (such as detention or retention ponds) to address treatment of runoff. The BMPs must be designed and sized to remove pollutants from runoff prior to the runoff discharging into the storm drain system.

The standard for the Best Management Practices (BMPs) that are incorporated into projects is “maximum extent practicable.” The C.3 permit requirements define “maximum extent practicable” and include design criteria.

New projects of a certain size—those that create or replace one acre or more of impervious surface—will be required to incorporate design features and/or treatment devices (collectively known as BMPs) aimed at controlling the site runoff. This requirement will go into effect on July 15, 2003. Thus, the new requirements will apply to project applications that are deemed complete on or after this date. By October 15, 2004, the C.3 requirements will also apply to projects that create or replace 5,000 square feet or more of impervious surface (note that this 5,000 square-foot threshold may change).

The new permit also requires the City to develop a Hydromodification Management Plan (HMP), which will identify areas where increased runoff increases the likelihood of erosion and other impacts to streams. Because the post-project runoff flow and volume must not exceed pre-project rates or durations in these areas, projects will need to meet requirements for flow control in addition to requirements for treatment of stormwater.

The City's Approach

The Milpitas City staff has recognized that, because of the types of BMPs necessary to comply with the C.3 provisions, development project applicants will need to carefully consider site layout, including the sizes and configurations of landscaped areas and impervious surfaces, such as buildings and paved areas—and they will need to do this at the beginning of the project approval phase, that is, during the Planning Commission review process. Variables such as annual rainfall, soil type, and slope must also be taken into account when planning the BMPs for a project.

This careful initial consideration is so that the plan addresses the proper allocation of space and geometry for the treatment devices. The lack of careful consideration at the beginning of the project design could result in the applicant having to come back later to present significantly revised plans to the Planning Commission for consideration, in order to comply with the C.3 permit requirements—thus wasting the applicant's, staff's and Commission's time and resources. Therefore, staff has determined that the Planning Commission application package must include a detailed Stormwater Control Plan, delineating the project's BMPs.

The Planning Commission will notice the following changes for application reviews of larger projects:

- The project's Stormwater Control Plan will look different from those that have been submitted for Planning Commission review in the past. The new plans will contain information that was not previously required, and they will be more detailed—in fact, containing a level of detail that in the past has been deferred to the building permit plan check stage. Project applicants will need to hire a civil engineer for this work.
- Here will be more extensive special conditions of approval recommended by City staff.

Stormwater C.3 Guidebook

City staff members, with consultant assistance from Dan Cloak and Associates, have worked to prepare a guidebook for use by staff and project applicants, in order to assist people in understanding the new C.3 requirements and to help them prepare project plans that comply with the requirements. The Stormwater C.3 Guidebook provides chapters addressing the following:



- An overview of the regulatory environment
- An introduction to stormwater concepts
- Step-by-step instructions regarding preparation of the Stormwater Control Plan
- Information regarding the role that CEQA (California Environmental Quality Act) plays concerning the C.3 provisions
- Technical requirements
- BMP maintenance (operation and maintenance will be an ongoing facet of project BMPs, both during and after site construction)
- Alternative compliance options

The guidebook also provides a glossary, references and resources, as well as appendices containing data, example Stormwater Control Plans, and other information to assist applicants in preparing their Stormwater Control Plans.

Special Conditions

For applicable projects, the Planning Commission will see new recommended special conditions pertaining to urban runoff. The first basic new condition requires the building and site improvement/landscape permit plans to incorporate the approved Stormwater Control Plan features (as approved by the Planning Commission) prior to building, site improvement or landscape permit issuance. This will ensure that the project construction actually includes the approved treatment BMPs.

Another condition requires the applicant to provide a stormwater control operation and maintenance (O&M) plan, describing operation and maintenance procedures needed to insure that the treatment BMPs and other stormwater control measures continue to work as intended over the life of the project and do not create a nuisance. The O&M plan would be required to be approved by City staff prior to issuance of a Certificate of Occupancy for the project.

Other special conditions may be recommended as well, including conditions that the Planning Commission has already seen in past projects, and conditions recommended by City staff to augment a proposed Stormwater Control Plan that is not complete. Examples include operational conditions regarding restaurants, such as restaurant staff training regarding handling of food and garbage, and design conditions relating to source control BMPs.

RECOMMENDATION

No Planning Commission action is required at this time. A resolution adopting a final draft Stormwater C.3 Guidebook will be brought to the Planning Commission in June, prior to the July 15, 2003, effective date of the new C.3 provisions.